

Application No. 09/869,635
Amendment dated April 2, 2003
Reply to Office action of October 2, 2002

The following listing of claims will replace all prior versions and listings of claims in the above-referenced application:

Listing of Claims:

Claims 1-8 (Cancelled)

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Claim 9 (Currently Amended): Device for discriminating nuclear fuels in an installation, comprising a structure subjacent to storage cells immersed in a water filled bay, comprising a first detector, (15), of a first ~~type of~~ radiation, a second detector, (16), of a second ~~type of~~ radiation, a waterproof casing, (2), containing the detectors, and means of attaching the casing, (13, 14), to a boom, (3), that descends towards the fuel and means of placing, (6, 9), the casing in a given position on at least one of the cells, (5), adjoining a cell containing the nuclear fuel, (26), that is the subject of the discrimination.

Claim 10 (Currently Amended): Device for discriminating nuclear fuels according to claim 9, whereby ~~one of the~~ second detectors is a gamma radiation detector located behind two collimators in continuation (25, 31, 32, 34), comprising a rear collimator, located just in front of the said second detector and opening up onto the whole detection area of a detection body, and a front collimator, with a slot section extended in a transversal direction of a fuel element, and the first detector is a neutron detector.

Claims 11-12 (Withdrawn)

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canceled.

Claim 13 (Currently Amended): A device for discriminating a nuclear fuel in an installation comprising a structure subjacent to storage cells immersed in a water filled bay, comprising a first detector of a first ~~type of~~ radiation and a second detector of a second ~~type of~~ radiation, a waterproof casing containing the detectors, means for attaching the casing to a boom, means for positioning the device on at least one of the cells which is adjacent another cell in which the nuclear fuel is contained, the means for positioning the device being located under the casing, and a shield of the second ~~type of~~ radiation which is contained in the casing, the shield comprising a thinner part in front of the first detector and a thicker part in front of the second detector and above the first detector, wherein the first detector is a neutron detector and the second detector is a gamma ray detector, and the thicker part of the shield comprises a front collimator extending towards the second detector and having a section which is elongated in a transversal direction of a fuel element.

Claim 14 (Cancelled)

Claim 15 (Currently Amended): A device according to claim ~~14~~ 13, wherein the second detector is surrounded by a shield comprising a rear collimator which is a conoidal having a base with a largest axis extending out in the transversal direction of the rod.

Claim 16 (Currently Amended): A device according to claim ~~15~~ 13, wherein the shield surrounding the second detector is slidably contained in the casing.